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A RAND NOTE

Protracted Conflict in Central Europe:  
A Conceptual Analysis

John K. Setear

November 1989

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This Note explores protracted war in Europe, defined as war lasting longer than 30 days; examines some possible pathways to such a war; hypothesizes the general phases that might constitute a protracted war; and discusses the political and military problems that national leaderships and military commanders might face in such a conflict. E - 17

## **A RAND NOTE**

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### **Protracted Conflict in Central Europe: A Conceptual Analysis**

**John K. Setear**

**November 1989**

**Prepared for the  
Director of Net Assessment,  
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## PREFACE

This Note, the first of a two-part set, is a conceptually oriented piece discussing protracted war in Central Europe involving the superpowers. The second Note recounts a political-military game of protracted European war played by RAND researchers. The game both generated insights useful in considering protracted war at the conceptual level (which have been incorporated into this Note) and suggested some other, generally applicable lessons (which are discussed in the second Note).

This work was conducted by the RAND Strategy Assessment Center and sponsored by the Director of Net Assessment in the Office of the Secretary of Defense, under the auspices of RAND's National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense and the Joint Chiefs of Staff.

Comments and inquiries are welcome; they should be directed to the author or to Dr. Paul K. Davis, Director of the RAND Strategy Assessment Center.

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## **SUMMARY**

This Note explores protracted war in Europe between the Warsaw Pact and NATO. It advances a working definition of "protracted war," examines some possible pathways to such a war, hypothesizes the general phases that might constitute a protracted war, and discusses the political and military problems that national leaderships and military commanders might face in such a conflict.

### **DEFINING PROTRACTED WAR**

The Note briefly discusses the definition of "protracted war" and concludes that, for our purposes, war lasting longer than 30 days is protracted. Thirty days is a typical planning horizon. NATO's pre-war ammunition stocks are likely to be critically depleted after 30 days of conflict; and a war in Central Europe fought for longer than 30 days is likely in any case to see a number of issues rise to prominence that can be downplayed or ignored in short-war scenarios.

### **PATHWAYS TO PROTRACTED WAR**

The trend in warfare has been toward greater firepower and mobility, and toward year-round, 24-hours-a-day battle. Many analysts have concluded that combat between NATO and the Warsaw Pact in Central Europe will be intense and fast-moving. The geographical slenderness of the FRG and NATO's first-use doctrine, in conjunction with the assumed conventional superiority of the Pact's forces, are hypothesized to lead rapidly either to the occupation of the FRG or to the use by NATO of nuclear weapons. The occupation of the FRG is assumed to signal the end of the war and the NATO alliance, whereas the use of nuclear weapons is assumed to signal the end of the war through mutual exhaustion or global nuclear holocaust. If NATO's forces prove capable of stopping an advance by the Warsaw Pact, then it is assumed that the Soviets will use nuclear weapons or that the Pact will dissolve. Even in the absence of nuclear warfare or alliance dissolutions, conventional attrition is generally thought likely to be of sufficient magnitude to lead to peace-through-exhaustion.

This chain of assumptions, however, is hardly unbreakable. Skeptics of the short-war scenario might begin with the reminder that both world wars were preceded by

incorrect predictions that the conflict would be brief. And in wars in which peace is attained through something like mutual exhaustion, the war generally ends only after years, not weeks, of combat.

One can also raise more specific objections to the chain of short-war assumptions. The loss of the FRG would be a severe blow to NATO, but numerous European coalitions have continued the fight even after a crucial member has surrendered.

The use of nuclear weapons is, of course, likely to lead to unprecedented attrition. Nonetheless, Soviet doctrine has shifted toward the possibility of a protracted conventional phase, or NATO may in the existential moment choose not to risk annihilation to test the validity of intra-war deterrence theory. It may even be that, as with the then-equally-horrific introduction of poison gas or of strategic bombing with conventional explosives, the use of nuclear weapons will lead to higher casualties but not a speedy end to the conflict.

High-intensity wars have also led on some occasions to stalemates rather than surrender. Improvements in firepower and mobility have in any case frequently failed to translate into more rapid movement in the front lines or more rapid conclusions of war, as World War I and the American Civil War demonstrated.

The general lesson is not that protracted war in Central Europe is inevitable, but that it may be worth more attention than it has received so far. One must always keep in mind, however, the possibility that NATO will simply run out of ammunition long before the Warsaw Pact—a development likely to end the war rapidly.

## **PROBLEMS OF PROTRACTED WAR**

### **Phases of Protracted War**

The course of a protracted war is of course difficult to predict, but one can speculate that such a conflict will fall into three phases. In the first, units extant before the war will fight with pre-war stocks of weapons platforms and munitions according to deployments and tactics developed before the war. This phase has been extensively studied. In the third phase, units trained since the beginning of the war will fight supported by production and planning undertaken during the conflict. This phase is one about which speculation is particularly difficult, given the unpredictability of conflict and the time allowed for military and political systems to adapt to intra-war circumstances. The second, transitional phase is likely to last from somewhere in the first few months of



conflict to at least the six-month or one-year mark owing to the long lead times involved in producing modern weapons systems, the likely pace of manpower and industrial mobilization, and the difficulty that intra-war production will have in replacing heavy intra-war losses. Some speculation about this phase of the war is at least possible.

### **Military Problems**

One crucial military problem—at least for NATO—is likely to be the *sustainability* of forces in the field. The paucity of NATO munition stocks for a protracted war is apparent and the uncertainties of replenishment remain great. Ammunition-production facilities in the United States, for example, are few in number and low in readiness, and are likely at first to lack the requisite skilled labor. The state of European facilities is reputedly better but remains a question mark. The Soviets are generally credited with stocks of conventional munitions sufficient to support 90 days of combat in Central Europe, though the state of their production facilities is rarely discussed. Nations outside of the NATO and Pact alliances might be one source of weapons systems and munitions, at least in the short run, if the alliances could purchase from them weapons previously sold to them.

Tactical *adaptations* may play an important role during the transitional phase. NATO's forces are likely to run out of high-technology munitions before they run out of weapons platforms or more traditional munitions, and this condition is likely to require operational adaptations. Tactical adaptations stemming from actual levels of weapons effectiveness that vary greatly from pre-war predictions are more difficult to anticipate, though no less likely.

Protection of U.S. *sea lines of communication* will take on significant importance in the transitional phase of a protracted war. Transport may also be problematic, but the peak demands on shipping tonnage are more likely to occur during the first week of the war.

The question of *theater priorities* is another issue that will rise to greater prominence if the conflict continues beyond the first month. The strains of transporting huge numbers of men and munitions from the central homelands to Central Europe is likely to ease somewhat, freeing transport for the support of inter-theater movements; and pre-war allocations of forces are likely to prove wanting in some aspects. Theater priorities will be a balancing of reinforcing hard-pressed fronts, attempting to take the offensive on new or previously understrength fronts, and bolstering fronts where combat

is feared. From the American perspective, Central Europe is likely to remain the primary theater of concern both because of its crucial importance to U.S. interests and because of the relative unattractiveness of most other fronts for offensive action. The Soviets are similarly likely to consider Central Europe the true prize, but they will have an opportunity in the Persian Gulf, and a liability in their border with the People's Republic of China, that the United States does not share.

### **Political Problems**

Protracted war will also bring to the forefront two political issues sometimes downplayed in discussions of war in Central Europe: war termination and alliance cohesion. The two issues are in fact intertwined.

The loss of the FRG to a Pact invasion would be a momentous event, but, as mentioned above, the loss of an important member of a coalition does not always lead to termination of the war. NATO might choose to fight on rather than dissolve, or would at least have to decide if it would attempt to impose any preconditions on a cessation of hostilities. If NATO were unable to stop the Pact's advance cold but managed nonetheless to prevent the Pact from completely conquering West Germany, the situation could easily lead to stalemate rather than surrender, as each alliance might find it unacceptable to terminate the conflict with the other continuing to occupy a portion of the FRG. If a stalemate continued long enough for NATO's superior economic power to make itself felt on the battlefield, then the United States and its allies would need to decide whether it sought a return to the *status quo ante* or the end of Soviet influence in Eastern Europe. Even with a relatively fluid or short-term situation, NATO might wish to consider a counteroffensive into Pact territory to improve its bargaining position or to encourage defections in the Pact. Such a counteroffensive should not be lightly undertaken, however, as it may be seen as escalatory by the Soviet Union, or the territory taken as a bargaining chip may prove difficult for NATO casually to exchange at the treaty table.

The cohesion of the opposing alliances is also likely to be important even in a stalemated protracted conflict. NATO depends upon a number of its members to make significant contributions to its force structure, and the withdrawal of any of these countries could result in wholesale breakthroughs by the Pact. The non-Soviet Warsaw Pact members provide a significant contribution to the Pact's forces (though a diminishing contribution, at least as between the first and second phases of protracted

conflict), and Soviet lines of communication must pass through hundreds of miles of East European territory. Once committed, the democracies of NATO may prove that free will is the best guarantor of continuing participation. Nonetheless, a Soviet Union able to persuade East European troops to march to war and fight (and, given Pact deployments and doctrine, to die an early death) may be able to persuade the remaining forces to stay on the battlefield even after the shooting has persisted for some time.

## **ACKNOWLEDGMENTS**

Captain James Amerault, USN, provided valuable suggestions and supervision. Paul Davis suggested the study and contributed helpful comments. James Wendt provided a helpful review of an earlier draft. Nancy Lees, Regina Spencer, and Rose-Marie Vigil rendered able secretarial assistance.

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## I. DEFINING PROTRACTED WAR

In contrast to "nuclear war" or "naval warfare" or a host of other sorts of war, there is no self-evident definition of "protracted war." The words "protracted war" generally tend to conjure up one of two images in the minds of defense analysts and military officers. The first image, obviously rooted in the historical experience of World War II, is of a global war that lasts for years and hinges upon the capacity of the opposing coalitions to restructure their societies to generate and support the men and machines that they send into battle. The second image of protracted war, rooted in perceptions of dramatic changes in warfare since World War II, is of a war that somehow outruns the insatiable appetite of the modern battlefield, conventional or nuclear, for men and munitions. For those equipped with this second image, a modern war in Europe that lasts for six weeks—the length of the "lightning campaign" in which the Germans occupied France in World War II—would be protracted.

We adopt as our definition of protracted war any large-scale armed conflict in Europe between forces of NATO and the Warsaw Pact that lasts longer than 30 days. We do not exclude from our analysis the possibility that World War III will be as lengthy as World War II, but most planners currently plot the course of war in Europe for only about a month, and we wish to examine the full range of the waters that are thereby left uncharted. In addition, it is reported by some sources that the NATO alliance's pre-war stocks are unlikely to be sufficient for much more than a month of combat.<sup>1</sup>

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<sup>1</sup>NATO's inability to stockpile enough munitions to carry it through the first 30 days of a large-scale conflict with the Warsaw Pact is a widely shared, longstanding concern. A recent report by a number of notables, for example, asserts that one of NATO's top priorities should be to "meet its already established goals of providing 30 days of key ammunition stocks. The failure of NATO allies to meet this commitment is inexcusable. . . ." "Project on a Natural Resources Strategy for the United States and its Allies," *NATO: Meeting the Coming Challenge*, Center for Strategic and International Studies, Washington, D.C., November 1988, p. 50. The *Los Angeles Times* reported in late 1987 that "[t]he United States and its allies have ammunition stockpiled that would last fewer than 30 days under a full-scale Soviet attack," and a Congressman publicly criticized U.S. war planners in 1985 for being "[c]ontent with less than a 30-day supply of munitions." See "NATO Aides Fear European Vulnerability," *Los Angeles Times*, December 2, 1987, part I, p. 7; Denny Smith, "Restock Inadequate Munitions Reserve," *Wall Street Journal*, October 29, 1985, p. 28 (Eastern edition). In 1983, a well-respected analyst stated that NATO had only a 15-day stock of munitions on hand. See William

and the issues of resupply and restockage that would arise at that point are common to both visions of protracted war.

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W. Kaufman, "Nuclear Deterrence in Central Europe," in John D. Steinbruner and Leon V. Sigal (eds.), *Alliance Security: NATO and the No-First-Use Question*, The Brookings Institution, Washington, D.C., 1983, p. 86.

Those who examine particular nations within the NATO alliance, rather than discussing NATO as a whole, typically conclude that the United States is better off than its NATO allies. Charles Groover, for example, has stated: "The NATO allies are, almost across the board, significantly worse off than we are." Charles W. Groover, "Combat Sustainability in the U.S./NATO-Warsaw Pact Balance," App. V, in General Accounting Office, *NATO-WARSAW PACT: U.S. and Soviet Perspectives of the Conventional Force Balance*, Supplement B to a Report to the Chairman, Committees on Armed Services, U.S. Senate and House of Representatives, December 1988, p. 76. Similarly, Anthony Cordesman concludes: "Stocks of munitions and spare parts [for the U.S. Army] are better than those of any other NATO Army, but the U.S. Army would still begin to encounter significant shortages after several weeks of intense combat." Anthony H. Cordesman, *NATO's Central Region Forces: Capabilities/Challenges/Concepts*, Jane's, London, 1988, p. 240.

Indeed, according to Cordesman, some of the NATO allies clearly have fewer than 30 days' worth of munitions stocks. Of the West German Army, for example, which provides roughly half of the most ready manpower in the Central Region, Cordesman states:

The Field Army has less than 30 days of war reserves and ammunition stocks for intensive conventional combat. The expansion of its Territorial Army has left some elements with only three to eight days of conventional munitions, and a week or less of anti-tank guided missiles. Fully mobilized German Field and Territorial Army Corps area and Military Regions would have a maximum of a little over 20 days of ammunition and an average of 10-15 days.

Cordesman, p. 101. The Belgian Army is said to be in worse shape, with "balanced stocks for less than 10 days of intensive armored combat." Cordesman, p. 183. The French are allegedly better off, with "about 17-28 days of major ammunition stocks for sustained high intensity combat in the Central Region." Cordesman, p. 210.

Some in fact believe that 30 days is a generous estimate of NATO's sustainability: "If the defence of Europe was not decided in the first *ten* days, shortage of munitions might become the determining factor." David C. Isby and Charles Kamps, Jr., *Armies of NATO's Central Front*, Jane's, London, 1985, p. 18 (emphasis added). And the summarizing paper of a recent meeting of dozens of experts on the NATO-Pact balance stated:

Logistics is usually considered part of sustainability and refers here to the system by which combat supplies are delivered to forces in the forward area. . . . Participants stressed that NATO's logistics weaknesses are even more serious than its limited war reserve stocks in creating shortfalls in NATO's combat sustainability. As noted earlier, because of logistics problems, *NATO forces would run out of combat supplies after 3 to 5 days of fighting.*

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General Accounting Office, *NATO-WARSAW PACT: U.S. and Soviet Perspectives of the Conventional Force Balance*, Supplement A to a Report to the Chairman, Committees on Armed Services, U.S. Senate and House of Representatives, December 1988, p. 23 (emphasis added).

None of the above statements is an official governmental position, of course. Statements of those currently holding positions in the government tend to be more restrained, though hardly complacent. For example, the U.S. Joint Staff recently stated:

Although ammunition stockpiles [for U.S. forces] have improved, commanders continue to identify inadequate ammunition stockpiles as a significant constraint on their combat capabilities. These shortages are particularly acute for the more modern munitions. . . .

*United States Military Posture FY 1989*, p. 78. And then-Secretary of Defense Weinberger noted in 1986 that "achieving our modest mid-term objective [in conventional sustainability] has been painfully slow." *Report of the Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1987 Budget, FY 1988 Authorization Request and FY 1987-1991 Defense Programs*, February 5, 1986, p. 125.

In an open hearing before the Congress, one representative of the United States Army has been a bit more specific about difficulties in obtaining much more than 30 days' stock of munitions. In late 1985, an Army general showed a congressional committee a chart with a number of boxes. The lowest four boxes were designated "Ammunition Initial Issue Quantity," "Day 0 to 30 Resupply," "Operational Projects," and "Depot Level 1." See "Department of Defense Ammunition Requirements and Production Base," *Hearing Before the Subcommittee on Preparedness of the Committee on Armed Services*, United States Senate, 99th Congress, 1st Session, S. Hrg. 99-414, October 31, 1985, p. 2. The fifth box from the bottom was labelled "Day 31 to 45 Resupply"; the next box read "Day 46 to 60 Resupply, U.S. Forces." In reference to this chart, the following exchange occurred:

Senator HUMPHREY.	So you fully fund the first four boxes?
General MOLINELLI.	Yes, sir.
Senator HUMPHREY.	Then you partially fund the boxes above that?
General MOLINELLI.	We have not been able to fund beyond that level for most of our line items for a number of years.
Senator HUMPHREY.	Zero?
General MOLINELLI.	That is correct.
Senator HUMPHREY.	All of the above are zero?
General MOLINELLI.	Yes.
Senator HUMPHREY.	What does that tell us in open session about resupply after day 30?
General MOLINELLI.	It tells you we are very dependent on our production base. We are dependent on substitute items of ammunition.



## II. PATHWAYS TO AND PROBLEMS OF PROTRACTED WAR

The majority of analysts and planners believe that protracted conflict is unlikely. We do not seek here to overturn that belief directly, but rather to identify the chain of assumptions implicit in that belief, and then to discuss the degree to which history is consistent with these assumptions.

### PATHWAYS TO PROTRACTED WAR

#### The Short-War Scenario

Civilization, said Alfred North Whitehead, has advanced by increasing the number of things we can do without thinking.<sup>1</sup> War appears to have advanced chiefly in the direction of doing things without stopping. Campaigns in Europe once were limited to the few months between the drying of the ground after the winter thaw and the exodus of soldiers to the autumn harvest, but by the twentieth century significant operations could occur 12 months of the year. Recent developments in night-sensing technology may allow operations to occur 24 hours a day. In parallel with the increase in the time available for campaigning has been an increase in mobility. Charlemagne's soldiers mostly walked; the *Wehrmacht's* soldiers mostly rode horses or bicycles; the *Bundeswehr's* soldiers ride in tanks or armored personnel carriers. Developments in naval mobility have been less dramatic; the discovery and development of air mobility has been more dramatic. A similar upward trend in firepower is evident. The standard infantry firearms of the nineteenth century could be fired several times each minute; now they can be fired several times each second.<sup>2</sup> And nuclear firepower dwarfs the gains made in conventional firepower.<sup>3</sup>

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<sup>1</sup> Alfred N. Whitehead, *An Introduction to Mathematics*, ch. 5, 1911, as quoted in *Bartlett's Familiar Quotations*, 15th ed., Little, Brown and Company, Boston, 1980, p. 697.

<sup>2</sup>For a discussion of the resulting trend toward greater dispersion of forces, see Trevor N. Dupuy, *Numbers, Predictions, and War*, Macdonald and Jane's, 1979, pp. 27-30.

<sup>3</sup>The attack on Tokyo by U.S. bombers on March 9, 1945, killed about 85,000 civilians and required over 500 B-29 bomber payloads. The attack on Hiroshima of August 6, 1945, killed about 70,000 civilians and required one B-29 payload. For casualty figures, see J. Carson Mark, "Nuclear Weapons: Characteristics and

These developments have led many to conclude that combat between the forces of NATO and the Warsaw Pact would be extremely intense. The inference then generally drawn is that such a war will also be brief, at least if it remains conventional:

Regarding that [conventional] balance, the conventional wisdom is that the Warsaw Pact enjoys an overwhelming advantage. In the event of a conventional war, the Soviets are expected to launch a *blitzkrieg* that will lead to a quick and decisive victory.<sup>4</sup>

One commonly advanced explanation of why the next war would be short combines the assumption of intense combat with the assumption that the Pact's conventional forces are superior to NATO's conventional forces, either in their initial combat capabilities or in their logistical support. The rapid pace of combat would allow the Pact to make significant territorial gains quickly (whether as a result of initial advantages in force exchanges that mobile forces can rapidly turn into territorial gains, or advantages accruing slightly later when rapid ammunition expenditures reveal NATO's inability to sustain its forces). Those territorial gains, combined with the geographical slenderness of the FRG from east to west,<sup>5</sup> would soon force NATO to decide whether to give up the

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Capabilities," R. Adams and S. Cullen (eds.), *The Final Epidemic*, 1981, pp. 93-94. For the number of planes in the Tokyo raid, see Edward Jablonski, *Airwar*, Vol. 4, 1975, p. 204.

<sup>4</sup>John Mearsheimer, "Why the Soviets Can't Win Quickly in Central Europe," *International Security*, Summer 1982, p. 3. See also Barry Posen, "Measuring the European Conventional Balance: Coping with Complexity in Threat Assessment," *International Security*, Winter 1984/85, p. 48. ("Western scholars and political leaders have tended to fixate on the powerful offensive potential of Soviet armored forces, thus creating fears that a conventional war in Europe could end in a quick NATO defeat.")

<sup>5</sup>Anthony Cordesman notes:

The USSR only has to move its forces 100-200km further west, and it will still be on the edge of victory. While the Federal Republic of Germany's industry is still heavily concentrated in the Ruhr, four of its seven major industrial complexes are near the Czech or inter-German border. These include the complexes around Hamburg, the Wolfsburg-Hanover axis, Numburg, and Munich.

Even if Soviet armor can only move 100 km, it will control at least 30 percent of West Germany's population and 25 percent of its economy. If it can reach the Rhine to the north, it will control at least 75 percent of West Germany's population and resources. "The NATO Central Region and the Balance of Uncertainty," *Armed Forces Journal International*, Vol. 120, July 1983, p. 18. See also Samuel Huntington, "Conventional Deterrence and Conventional Retaliation in Europe," *International Security*, Vol. 8, Winter 1983/1984, p. 39. (Soviet occupation of a politically significant portion of FRG is "a certainty produced by geography and any realistically conceivable balance of conventional forces in Central Europe.")

FRG or to use nuclear weapons. At least one noted military affairs analyst has pointed out that if NATO is pushed out of the FRG, it is generally presumed to have lost the war and thus presumed to sue for peace.<sup>6</sup> If NATO uses nuclear weapons, the resulting destruction is generally presumed to lead to sufficient destruction of either military forces or civilians to force the war to a rapid, if uncertain, conclusion.

If NATO's forces prove capable of stopping the Pact's conventional attack, the war is similarly predicted to be unprotracted. Either the Soviets will use nuclear weapons,<sup>7</sup> with results similar to those from NATO first use, or the conventional battlefield will chew up forces so rapidly that the war will grind to a halt and the Soviet Union will reach a settlement before its Pact allies can begin to drift from the fold.<sup>8</sup>

These stories tell at least as likely a tale about large-scale future conflict in Central Europe as any tale of protracted war. One should nonetheless recognize that the short-war stories make a number of assumptions, that none of the assumptions is unassailable (especially in light of the course of previous conflicts in Europe), and that a protracted war could result if just a few of the assumptions were to prove false.

### **Protracted Variations on the Short-War Scenario**

Perhaps the first point to be made is the general one that, for whatever reasons, the two major European conflicts of this century proved to take much longer than was initially expected. One can easily discern differences between conditions at the beginning of World Wars I and II on one hand and the conditions of the present on the other, but it is worth remembering that two European conflicts very different in most

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<sup>6</sup>Anthony Cordesman has stated:

"NATO can lose many small confrontations or conflicts. It cannot, however, risk more than the most minor loss of territory in the Central Region . . . without defeating its purpose. To succeed as an alliance, NATO must succeed in deterring a major armored attack on the Central Region. . . .

Cordesman, 1983, op. cit., p. 18. For a different but equally gloomy view of the results of a Pact invasion of the FRG that does not escalate to nuclear conflict, see Huntington, op. cit., pp. 38-39.

<sup>7</sup>See John Mearsheimer, *Conventional Deterrence*, Cornell University Press, Ithaca, 1983, p. 165 n. 3 ("there is the danger that nuclear weapons will be used if the Soviets do not win a quick and decisive victory").

<sup>8</sup>For a discussion of the threat of unrest in Eastern Europe if the Pact becomes entangled in a protracted conflict, see A. Ross Johnson, Robert W. Dean, and Alexander Alexiev, "The Armies of the Warsaw Pact Northern Tier," *Survival*, Vol. 23, July-August 1981, pp. 174-182. See also Huntington, op. cit., p. 42.

ways from one another still both resulted in long wars despite expectations to the contrary by those who started them.<sup>9</sup>

The world wars also illustrate a more specific fallacy with the assumptions of the short-war scenario: the assumption that the war will end quickly because the FRG will either be quickly conquered or quickly shown not to be rapidly conquerable.

The NATO-inferior branch of the short-war story assumes that the FRG (and if the Soviets so desire, the Benelux nations) will be quickly lost, and that such a loss will result in the end of the war. The assumption that an aggressor can defeat an alliance by defeating a few of its members may prove true, if the nuclear shadow convinces the non-German nations of NATO that defeat is superior to possible annihilation, but it has not been historically true that the loss of the territory of a single member of a coalition causes the remaining members to fold their tents. In World War II, Great Britain saw its primary ally occupied in a matter of weeks and its continental force reduced in that campaign to tatters, but continued to fight alone rather than surrender.<sup>10</sup> Germany fought on for almost two years after Italy, its only voluntary partner in Europe, had surrendered (though the fact that Italy was a distinctly junior partner should not be overlooked). The western powers did not sue for peace in World War I upon Imperial Russia's demise. And the promise of eventual victory can be far fainter than it was for the western powers in World War I but can still persuade a nation to fight on: Great Britain did not surrender when it stood alone against a Germany that had conquered or co-opted all of Central Europe, and a few years later Germany fought to the finish despite only the slimmest prospects of eventual success.

The NATO-superior branch of the short-war story can draw little more historical support for the assertion that the next war must inevitably end rapidly. A failed Soviet offensive into the FRG<sup>11</sup> might lead to a speedy decision by the Soviets to withdraw, but

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<sup>9</sup>The generally held assumption before World War I, for example, was that the conflict would last six weeks. Richard Ned Lebow, *Nuclear Crisis Management: A Dangerous Illusion*, Cornell University Press, Ithaca, 1987, p. 33.

<sup>10</sup>The advent of missiles may have removed from Great Britain its invulnerability as a base from which to contest the Continent, but the advent of missiles may also make the territory of France a sanctuary from ground attacks by the Pact, and France is more conveniently located as a base from which to retake the FRG than is Great Britain.

<sup>11</sup>For some arguments that Soviet conventional superiority is insufficient to conquer the FRG rapidly, see Mearsheimer, 1982, op. cit.; Posen, op. cit., pp. 47-88. For a summary of the uncertainties involved in calculating the balance in Central Europe, see Cordesman, 1983, op. cit., p. 19.

such a rapid resolution is historically unprecedented. When Germany's advance in World War I stalled short of its objectives, it took more than 30 *months* for the war to end. When Germany's advance into the Soviet Union in World War II had failed to reach in six months the goals originally intended to be achieved within six weeks, Germany did not throw in the towel. Nations that start a war have historically been reluctant to admit that doing so was not only a mistake but one that cannot be retrieved.

But history may have begun anew in the desert near Alamogordo, and it is in any case certainly necessary to address specifically the shadow that nuclear weapons cast over modern warfare. Nuclear weapons are undisputedly far more destructive than conventional explosives. But there are two points on which the short-war story is nonetheless disputable in its treatment of nuclear weapons: whether such weapons would in fact be used, and what would happen if they were used.

The short-war story assumes that nuclear use is likely in either of two circumstances: if NATO does poorly (with first use by NATO) and if NATO does well (with first use by the Warsaw Pact). Soviet declaratory policy has been moving gradually away from early nuclear use,<sup>12</sup> though this policy may well assume significant conventional success. NATO declaratory policy firmly favors use of nuclear weapons if Soviet success is significant. But prudent declaratory policy and prudent action may diverge.<sup>13</sup> For NATO, its declaratory policy will by hypothesis have failed to prevent the outbreak of a large-scale war, and leaders might decide during a war that the risks to themselves from escalation exceeded the gains from using nuclear weapons. In an age of rough nuclear parity, using nuclear weapons is likely to result in vast destruction for *both* sides; once the threat of use has failed to deter conventional war, each side might therefore focus on the damage that it will *suffer* rather than the damage that it could *inflict*, and both sides might decide to forgo the use of nuclear weapons. One should note that NATO also faces the possibility of significant difficulty in reaching a unanimous decision to use nuclear weapons given the possibly divergent interests of its 16 members,

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<sup>12</sup>See Graham Vernon, "Soviet Options for War in Europe: Nuclear or Conventional?" National Security Affairs Monograph 79-1, National Defense University, January 1979; Lebow, p. 36.

<sup>13</sup>Such a divergence is at the heart of arguments that NATO's first-use doctrine is no longer credible in an era of rough nuclear parity between the United States and the Soviet Union. See McGeorge Bundy, George Kennan, Robert McNamara, and Gerard Smith, "Nuclear Weapons and the Atlantic Alliance," *Foreign Affairs*, Vol. 60, Spring 1982, pp. 754-758.

and that the United States might face significant political costs if it were to use nuclear weapons unilaterally (or use them with the consent of only one or a few of the "dual-key" nations). Democracies may also face significant public resistance to first-use,<sup>14</sup> and may be forced to exercise forbearance or risk grave domestic difficulty.

It is even conceivable that nuclear weapons will be used, but will not bring the war to a rapid close. Wars have continued despite the introduction of the machine gun and mustard gas, which, like the tactical nuclear weapon, were predicted to have made the battlefield too destructive and intimidating for the psyche to bring itself to fight. Wars have continued despite the introduction of the strategic bomber, which, like the intercontinental nuclear-tipped missile, was predicted to have made the battlefield itself obsolete by allowing a nation a direct means of terrorizing an opponent's population into surrender. Indeed, most agree that strategic bombing in World War II did minimal damage to the nations attacked, and that the civilians' will to fight was strengthened rather than undermined by the bombing. Nuclear weapons obviously allow for more rapid and more extensive destruction than has ever occurred, but it is unclear whether nations will actually unleash that power and whether such an unleashing will have the effect of bringing the war to a rapid close.

One might also note—especially if one is considering a war fought with conventional weapons—that exhaustion generally takes years, not weeks, to drive nations to peace, even when losses are high. In World War I, all the major nations of Europe bled themselves virtually dry and ripped apart the imperial system without calling a truce; in World War II, Germany chose unconditional resistance in the face of the allies' desire for unconditional surrender.<sup>15</sup> Historically, there have been long periods during wars when the front line moves little (as in World War I) or when the two sides are formally at war but little actual military conflict occurs (as in the *blitzkrieg* between Germany and France during World War II). It therefore seems possible that, even if the modern battlefield swallows men and munitions at a prodigious rate, the war might not thereby end of its own accord. One need only look to the Iran-Iraq war for a current

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<sup>14</sup>For a summary of Western public opinion in 1981, see Huntington, *op. cit.*, pp. 33–34.

<sup>15</sup>One could argue that the picture in Asian wars involving the United States is somewhat different, however. Arguably, moral exhaustion led to the end of the Viet Nam war and mutual attrition led to the end of the Korean war. Even if one accepts these examples as applicable to Europe, however, one should remember that the Korean and Viet Nam conflicts lasted rather longer than 30 days.

example of a war of heavy losses that has dragged on for *nine years*—despite Iraq's initial hopes for a speedy victory.

One would do well, however, to separate the possibility of mutual exhaustion from the possibility that NATO's forces will run out of munitions long before the Pact's forces. Analysts sometimes estimate that NATO's pre-war ammunition stocks are unlikely to be sufficient for more than 30 days of combat, whereas the Pact is usually credited with enough munitions for 90 days of combat.<sup>16</sup> If NATO's ammunition supplies run short while the Pact has plentiful supplies, the front (now typically called the "forward line of troops," or "FLOT") may well move rapidly westward. The day of reckoning might be delayed by judicious rationing—perhaps even delayed to the point where the Pact begins to suffer similar difficulties—but such rationing is likely to carry a price for NATO in the form of reduced Pact attrition stemming from the lessened frequency with which NATO's defending forces will be allowed to fire at attackers, and with it the possibility that the resultingly larger forces of the Pact will be able to advance more rapidly.

Even if losing the FRG or mutual exhaustion would lead to the termination of war in Central Europe between NATO and the Pact, it is not certain that such a loss or exhaustion would occur rapidly. The short-war story assumes that attrition will occur quite quickly on the modern battlefield, and the NATO-inferior branch of the argument further assumes that rapid attrition of NATO's inferior forces will lead to rapid westward advances by the Pact. These assumptions may be reasonable, but they are not certain.

Given the experience of the American Civil War and of World War I, it seems relatively safe to speculate that increases in firepower—at least when unaccompanied by significant changes in tactical doctrine—can lead to dramatic increases in attrition. The intense-attrition assumption also has some more recent combat data to support it: The 1973 Arab-Israeli War saw modern weapons systems disappear rapidly during a number of battles. Even in that conflict, however, the attrition rates for the war *as a whole* were not dramatically greater than in earlier conflicts.<sup>17</sup> In addition, it is possible that even battle attrition rates in Central Europe would be lower than in the Yom Kippur War: The fogs and forests of Germany, for example, may reduce attrition in comparison to the

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<sup>16</sup>On NATO's stocks, see footnote 1, above. On the Pact's stocks, see "NATO Aides Fear European Vulnerability," *Los Angeles Times*, December 2, 1987, Section 1, p. 7.

<sup>17</sup>See Dupuy, *op. cit.*, pp. 10–11.

clear skies and terrain of the Middle East. Many of the weapons systems in Central Europe have yet to see combat, and theoretical estimates of the potency of weapons are generally far more generous than results from the battlefield.

If attrition proves less than predicted, the diminished pace of the war could make protracted war possible. NATO forces with a greater number of troops remaining would be better able to hold their ground, delaying the necessity to choose between surrendering the FRG's territory or using nuclear weapons—at least if they had the munitions to sustain themselves. The Soviets might in the same situation nonetheless make enough progress to persuade them not to use nuclear weapons, and a conventional war could continue for well more than 30 days.<sup>18</sup>

The widespread mechanization of armies since World War II similarly does not guarantee a rapid close to the war, even when taken in combination with the parallel increase in firepower. In World War I, the machine gun dramatically increased firepower and the railroad dramatically improved potential mobility, but the war nonetheless dragged on for years. In World War II, the airplane (and, to a lesser extent, the tank) increased firepower and the tank dramatically improved potential mobility, but peace was years in coming.

One should note that one of the strongest links in the short-war story's chain of assumptions is the assertion that, if Soviet forces are superior in combat capabilities to NATO's forces, the superior Soviet force will be able to push NATO westward out of the FRG in a short period of time. This stems not so much from recent changes in the nature of combat but from the geographic slenderness of the FRG, which ranges between roughly 200 and 400 kilometers in width. An advance rate of 10 km/day is certainly consistent with historical rates of advance by superior forces,<sup>19</sup> and a month of such daily advances would allow the Pact's forces to occupy the vast majority of West German territory.

The possibility that the FRG will fall relatively soon if the Pact's forces prove superior to NATO's in combat, and that NATO's sustainability problems may lead to a rapid cessation of the war, are real. Nonetheless, virtually every other link in the chain

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<sup>18</sup>One should also remember that there are large stocks of capable, and sometimes even ultra-modern, weapons systems in the inventories of non-NATO/non-Pact nations. This equipment could, at least in the short run, serve as attrition "fillers" if crews are available and such equipment can be acquired and shipped to the European theater.

<sup>19</sup>See Dupuy, *op. cit.*, p. 16.



of short-war assumptions—that the loss of the FRG would end the war, that nuclear weapons will be used, that exhaustion will quickly follow upon a few weeks of conventional or nuclear combat, and that combat in Central Europe will see rapid westward movement of the FLOT—is open to question.<sup>20</sup> And if any link breaks, the next war in Europe could, like the two major wars in Europe before it, be a protracted one.

## **PROBLEMS OF PROTRACTED WAR**

### **The Phases of Protracted War**

Military commanders must evaluate the forces available to them, decide where they wish to deploy those forces, see that those forces are transported to the deployment areas, and ponder how those forces will be sustained once deployed. Commanders face those decisions regardless of the length of the war, but a protracted war may affect significantly the nature of those decisions. As the war wears on, the forces available increase as reserves are mobilized and entirely new units are raised. Forces can over time be redeployed to areas distant from their peacetime stations, as transportation needs generated by forces initially in being are met. Issues of sustainability may become crucial if pre-war stocks of munitions and refined petroleum products (POL) dwindle dramatically before intra-war production can gear up to match intra-war expenditures of supplies.

There are obviously some interrelationships among the factors of force structure, deployments, transportation, and sustainability. As the force structure grows, deployment options increase. More transportation is needed for those deployments, and more supplies, which in turn gives rise to a greater transportation requirement for those supplies. For the purposes of analyzing protracted war in Central Europe, one can divide

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<sup>20</sup>One might note that all of these four links except the nuclear-use decision depend upon ignoring a good deal of historical evidence. That current defense analysis generally makes little use of historical evidence has been argued by others focusing on a number of different segments of the American defense analysis community. See Bernard Brodie, *The American Scientific Strategists*, The RAND Corporation, P-2979, 1964, pp. 20–22 (discussing civilian defense analysts); Peter Poret, "The History of War," *Daedalus*, Vol. 100, Spring 1971, pp. 376–396 (discussing American academic historians); William DePuy, *Generals Balck and von Mellenthin on Tactics: Implications for NATO's Military Doctrine*, BDM/w-81-077-7R, BDM, December 19, 1980, p. 1 (discussing the American military).

the war into three phases: the standing-forces phase, the new-forces phase, and a transition between the two.

At the beginning of the next war, men already in uniform will fight with pre-war stocks of munitions in units already in, or earmarked for, the theater in which they fight. The tactics and operational plans that they employ, and the strategies that their political leaders use, will have been formulated before the war began. One might call this the standing-forces phase of the war (though more factors than just the forces involved are determined by the pre-war situation). If the war persists for a sufficiently long time, the forces engaged are likely to consist predominantly of men not in uniform at the beginning of the conflict and to use munitions and weapons produced since the war's beginning. Those men may well be fighting in units not in existence at the start of the war. The tactics, operational plans, and strategies that guide them are likely to have been formed in the crucible of war. One might call this set of circumstances the new-forces phase of the war (though more than just the forces involved will have come into being since the beginning of the war). In between these two phases will be a transitional phase with some characteristics of each of the standing-forces and new-forces phases as well as some unique characteristics.

The standing-forces phase of a war in Central Europe has been the subject of extensive inquiry—it is this phase, after all, that is the explicit or implicit scenario for almost all studies of, and plans for, future conflict in Central Europe. The new-forces phase is very difficult to study at all, since the new-forces world is by hypothesis different from the current state of affairs along a variety of dimensions. This world will probably be one in which the overall population and economic capacity of the opposing forces play a crucial role in determining the outcome of the conflict. Studying the new-forces phase, however, involves not only all the uncertainties that we now face about differences between peacetime predictions and the actual conduct of a war but also the difficulties of predicting what uncertainties a war itself will generate as it drags on for months. Nonetheless, one can make a very rough guess as to how long the transition from the standing-forces to the new-forces phase will take, and identify a number of issues that will be important in that transition.

In the light of the preconditions for the long-war phase, historical data and current planning horizons both imply that the new-forces phase will not begin for at least six

months—and perhaps more than a year—after the beginning of the conflict.<sup>21</sup> The United States does not plan to fill its current force structure of 24 infantry divisions until six months after manpower mobilization has begun. Industrial-mobilization planners do not expect significant gains in production until six months after industrial mobilization has begun. The production times for already-developed modern weapons are generally measured in years, not months, and the development time for such weapons is often measured in decades—though one might of course be able to compress those times somewhat in wartime. And historically, the United States has generally required at least six months before it has been able to increase significantly its forces in the field. One might also note that, to the degree that one contemplates the addition of entirely new units to the battle and to the degree that the high-attrition assumption of the short-war story is true, much of the initial mobilization of men, munitions, and weapons systems will have to make up for previous losses rather than contributing to increases over the pre-war force size.

### **Military Problems of the Transitional Phase**

In the several months of transition between the standing-forces phase and the new-forces phase, a number of issues will become important that are generally given only cursory treatment in short-war scenarios. For convenience, we divide "political" from "military" issues without believing that the division is a rigid one.

One crucial military problem—at least for NATO—is likely to be the sustainability of forces in the field. The paucity of NATO's munition stocks for a protracted war is apparent and the uncertainties of replenishment remain great. Ammunition-production facilities in the United States, for example, are few in number and low in readiness, and are likely at first to lack the requisite skilled labor. The state of European facilities is reputedly better but remains a question mark. The Soviets are generally credited with stocks of conventional munitions sufficient to support 90 days of combat in Central Europe, but the state of their production facilities is less clear.

Both sides may wish in the transitional phase to attempt to procure arms from nations outside their respective alliances. Nations such as Israel, Saudi Arabia, or

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<sup>21</sup>I assume throughout this subsection and the next that combat in the war begins within a month of force and industrial mobilization. For each month greater than one in which significant force and industrial mobilization occurs, the onset of the new-forces phase will occur roughly a month earlier.

Pakistan possess significant stocks of the most modern NATO weapons systems, and are thus a potentially promising source of such systems for NATO during the transitional period before the NATO nations' industries can produce large quantities of such weapons from scratch. The Pact is likely to be at a disadvantage in this particular area, at least if both alliances are roughly equal in their ability to persuade former buyers of sophisticated weapons systems to become sellers of such systems. The Soviet Union has not been as successful in arms exporting as the combined efforts of the United States, Great Britain, and France—though nations such as Syria, Libya, and Cuba may nonetheless have useful quantities of relatively modern systems available. In addition, Soviet control of the the sea lines of communication (SLOCs) necessary to transport arms from many of these nations is questionable at best.

NATO's initial reliance upon scarce high-technology munitions in naval and air missions means that a protracted war would see NATO forced to fight during the transitional phase with traditional weapons: pre-war stocks of high-technology missiles are unlikely to last until intra-war production increases significantly.<sup>22</sup> If the proponents of high-technology weapons are correct in claiming that these weapons have dramatically changed the nature of confrontations on the battlefield, then NATO will have to make a temporary but nonetheless dramatic readjustment to the tactics suitable for use with gun shells, iron bombs, and bullets. Planning for such a transition would appear to be minimal at the current time. Even if such a tactical transition can be accomplished, NATO's air forces are likely to suffer in relation to the Pact's forces:

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<sup>22</sup>For example, one analyst has stated that U.S./NATO stocks are "so low on such items as air-to-air missiles that we would probably exhaust our inventories within a week or two—well before we could expect to have dealt with the allocated shares of the enemy air threat." Groover, op. cit., p. 76.

Anthony Cordesman has reached similar conclusions in examining several of the air forces of individual nations. He believes that "[m]unition stocks remain well below 30 days" for the Luftwaffe. Cordesman (1988, op. cit.), p. 124. For Great Britain's RAF, he asserts "[m]unitions and parts stocks are at less than two weeks for balanced high intensity operations against a major Warsaw Pact theatre-wide offensive" (p. 162). And the Belgian Air Force, according to Cordesman, "has only a few days of stocks of air-to-air missiles," though near-term improvements are planned (p. 184). As for the United States, a USAF colonel stated in open congressional testimony in late 1985 that the Air Force had "no modern munitions, either in procurement or in the inventory, whose stockpile will sustain operations until new (after D-Day production) can reach our combat forces." "Department of Defense Ammunition Requirements and Production Base," *Hearing before the Subcommittee on Preparedness of the Committee on Armed Services*, United States Senate, 99th Congress, 1st Session, S. Hrg. 99-414, October 31, 1985, p. 52.

NATO's aircraft attrition may climb significantly as closer approaches to Pact planes and ground targets become necessary. Ship-to-ship warfare is also likely to change dramatically if one must be tens rather than hundreds of miles away before opening fire; here NATO may benefit if the Soviet Navy's dependence upon surface-to-surface and air-to-surface missiles proves more extensive than that of NATO's navies.

Less predictable tactical or operational adaptations may also occur during the transitional phase. Tactics and operational plans formulated before the war may prove unsuited to the realities of combat. The balance among the arms of ground forces may be significantly different from pre-war predictions, as occurred with the greatly diminished battlefield usefulness of cavalry during the American Civil War or the significant utility of the tank during World War II. Anti-tank guided missiles or attack helicopters could spell the end of the tank's recent dominance of the battlefield, for example. Attrition on certain air missions may prove to be significantly different from that expected, as in the case of unescorted deep-penetration bomber missions in daylight during World War II. A particular technological development or operational concept may revolutionize the battlefield, as interlocking fields of machine-gun fire did in World War I or as the blitzkrieg did in World War II. The transitional phase may therefore offer the more flexible armies the opportunity to gain a relative advantage over their opponents by more rapid adaptation to the unpredicted circumstances of war.<sup>23</sup>

A protracted conflict might also lead one side or the other to attempt to cross the chemical or nuclear "firebreak" in hopes of breaking the stalemate, even if that side had initially exercised restraint with respect to such weapons. The Iraq-Iran war clearly demonstrates, and World War I and the Vietnam conflict arguably show, that chemical weapons may become attractive even when the initial preferences of both sides have

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<sup>23</sup>The length of time necessary to make such adaptations is difficult to predict. During the 1973 Arab-Israeli conflict, the Israelis were able to adapt their armored-attack tactics to the increased lethality of anti-tank missiles in the space of a few weeks. See Dupuy, op. cit., pp. 17-18. The French were quite unable to adapt their pre-World-War-II tactics to the increased offensive capability of armored divisions within a similar timespan. Indeed, significant adaptations often take years rather than weeks. It took the Germans four years in World War I to develop *Stosstruppen* tactics capable of making significant penetrations of lines of entrenched infantry supported by machine-gun and artillery fire; even four years was insufficient for the participants in the American Civil War to overcome the defensive advantages of rifled muskets and entrenchments. The Western Allies in World War II required at least two years to produce and develop the materiel and doctrine necessary to conduct large-scale amphibious invasions.

been to forswear such weapons. The same might be true in a Central European conflict not only with respect to chemical weapons but also in the case of nuclear armaments. Such use may not break the stalemate—at least if the chemical example applies to nuclear weapons as well—but may nonetheless penalize a side that has not taken the proper operational precautions with respect to such weapons.

The transitional phase will also see the rise to prominence of maintaining the SLOCs between the United States and the battlefield. Unless the Soviets use nuclear weapons against transport shipping or their submarines prove extraordinarily potent (either because of pure combat effectiveness or the ability to locate very precisely particular high-value transport ships), effective interdiction of SLOCs during the first month of combat is unlikely. Given the long construction lead times for shipping, however, a persistent Soviet campaign might, over a period of many months, have significant effects on U.S. SLOCs.

One should note, however, that the transitional-phase question of transport-shipping attrition may be far less problematic than the question during the standing-forces phase of transport-shipping availability. If the United States is truly able to meet its goal of having ten divisions in Europe by the end of the first ten days of mobilization, then later shipping needs may well seem relatively easy to meet. Such a rapid movement of so many troops is unlikely to be necessary again: Later in the war, divisions are unlikely to be mobilized or created at the pace of one each day, and the supply of available U.S. forces generating a need for transport shipping is therefore likely to be significantly less than necessary to fulfill the ten-divisions/ten-days requirement. The Soviets are likely to face a similar situation: The long-distance movement of troops, and thus the transport requirements for moving them, is likely to be by far the most intense early in the conflict.

The other generator of transport requirements, of course, is supplies for troops already in theater. As the war proceeds, these requirements will increase as more forces remain in theater. The extent to which these requirements strain the transport system later in the war depends upon the ratio between the tonnage necessary to move troops and to support them—as well, of course, as upon both the transport and the in-theater troops subject to attrition—and we make no attempt to determine this ratio.

Determining theater priorities is an issue that both sides will face during a long war. Those priorities are initially set implicitly by existing deployments and movement

plans, and most available transport is likely during the initial days or weeks of combat to be assigned to the movement of units from the superpowers' homelands to their wartime deployment areas. As the months pass, however, the strains of transporting large numbers of men and munitions from the central homelands are likely to ease, and sufficient transport may well exist to move units in being before the war from one theater to another. In addition, as mobilization proceeds, units beyond those already in being at the start of the war will become available for assignment. The supply of units and available transport therefore seems likely to become significant after the first month or so of war.

One can identify three sorts of demands for those forces. First, forces might be needed as reinforcements to send to theaters where combat is already occurring. The United States, for example, might face not only a Pact attack across the inner German border but a North Korean attack against South Korea. Either or both fronts may be in need of reinforcements. Second, forces might be needed to open new theaters of war. The Soviets might wish to drive toward the Persian Gulf, whereas the United States might attempt attacks against the Kola Peninsula or Kamchatka, even if none of those areas saw combat at the very beginning of the conflict. Finally, a nation might wish to keep forces in place in—or even to reinforce—theaters in which it is neither currently fighting nor planning to initiate combat, but in which it fears future combat. The Soviet Union, for example, would surely be cautious about stripping forces from its border with the Chinese even if there were no hostilities in that area.

Although the superpowers would surely strike some balance between their commitments to Central Europe and their commitments elsewhere on the globe, it is important to realize that the scales of interests would appear to be weighted strongly toward Central Europe, at least from NATO's perspective. The United States has committed more forces to Central Europe than it has committed to any other theater outside their homelands, and these military commitments appear entirely consistent with the perceived political stakes. Indeed, NATO does not as an alliance plan to commit any forces outside of Central Europe<sup>24</sup>—though France, Britain, and the United States have certainly been willing to make some commitments of troops outside of Europe on their

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<sup>24</sup>See generally Elizabeth D. Sherwood, *The Out-of-Area Debate: The Atlantic Alliance and Challenges Beyond Europe*, The RAND Corporation, N-2268-USDP, May 1985.

own. The Western Allies in World War II did not find it especially difficult to decide on a Europe-first strategy.

Not only history but reasoned speculation supports the primacy of Central Europe. The conquest of Central Europe would likely free such a large number of Soviet forces for redeployment to other theaters that advances made elsewhere by NATO forces could be reversed at the Soviets' leisure if Central Europe had fallen. This is especially true since several possible targets for "horizontal escalation" by the West, such as the Kola or Kamchatka peninsulas or the Caucasus, are unlikely to have much direct effect on the war on the ground even if occupied by NATO troops.<sup>25</sup> Such operations would also operate at the end of long logistical tethers in inhospitable terrain. In addition, many of these targets are in the Soviet homeland and may thus represent a step up the escalatory ladder.<sup>26</sup>

From the Soviet perspective, the view is likely to be similar but not identical. Only the Soviet Union and the GDR have committed forces outside of Europe even on an individual-nation basis, and the rest of the Pact lacks much in the way of power-projection capabilities. As mentioned, victory in Central Europe is quite likely to allow later victories in other important theaters, whereas victory in other theaters is not likely to lead so surely to eventual victories elsewhere.

The Soviets have one opportunity and one liability that is not shared with the West, however: the Persian Gulf and the People's Republic of China, respectively. A Soviet drive to the Gulf and a closure of the Straits of Hormuz might have a significant effect on NATO's war effort, though the difficulty of such an operation should not be underestimated. China is more likely to be a source of significant demand for the redeployment, or at least retention, of Soviet forces: China deploys the world's largest army, much of it already along the Sino-Soviet border. The Soviets already think enough of the threat to station about a quarter of the Soviet army in the Far Eastern Theater of

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<sup>25</sup> A study examining U.S. options outside of Central Europe and Southwest Asia hypothesized that such operations would not be conducted in a conflict in which the outcome of large-scale combat in Europe was unclear, and that such "second-area" operations generally did not control the outcome of wars. Robert Perry, Mark A. Lorell, and Kevin N. Lewis, *Second-Area Operations: A Strategy Option*, The RAND Corporation, R-2992-USDP, May 1984, pp. 28, 47.

<sup>26</sup> Huntington argues for the "unimpeachable credibility" of a NATO threat to invade Eastern Europe with conventional forces (in response to a Soviet conventional invasion of Western Europe) on the grounds that such a counterattack is "retaliation in kind, at the same level and in the same theater as the initial attack." Huntington, op. cit., p. 41.



**Military Operations.**<sup>27</sup> The Sino-Soviet border is a particularly important factor because, in contrast to operations in the Persian Gulf, the Soviets may not have the initiative. A move by NATO nations against the Gulf states seems unlikely in the absence of Soviet intervention in the region, and thus the Soviets are likely to be left with the initiative in the Gulf while NATO focuses on Europe. The Sino-Soviet border is in contrast the primary concern of the PRC's forces, and the dictates of terrain and distance are also less constricting to the Chinese along their border with the Soviets than to the NATO nations in the Gulf and the Caucasus; prudent Soviet planners might therefore be worried about Chinese actions even in the absence of Soviet operations along that border.<sup>28</sup> One must of course realize that the PRC might well wish to ensure that it did *not* become involved in a war between NATO and the Pact, but the potential for the PRC to act as a significant constraint on Soviet deployments of units in its interior to Europe means that the issue is one worthy of some consideration.<sup>29</sup>

### **Political Problems In the Transitional Phase**

Protracted war also brings closer to the forefront at least two political issues that are frequently downplayed in analyses of short-war scenarios.

The first is *war termination*. A short-war analysis generally sets an advance to the Rhine as the goal of the Soviets, and their achievement of that goal implicitly ends the war. That achievement might well satisfy the Soviets, and with them the other members of the Warsaw Pact. The economically mightiest of Europe's NATO members would be subjugated, and the nation that twice invaded Russian territory in this century would be entirely under Soviet influence. But from NATO's point of view, only one of its members—albeit a clearly crucial one—would have been occupied, and as discussed above, alliances in similarly dire circumstances have fought on. The point is not that the

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<sup>27</sup>Department of Defense, *Soviet Military Power*, Government Printing Office, Washington, 1986, p. 9.

<sup>28</sup>See Mearsheimer, 1983, op. cit., p. 165, n. 3 ("Even if there was no imminent threat of war with China, a war of attrition in the West would threaten to weaken the Soviets to such an extent that they might consider themselves vulnerable to a Chinese attack.").

<sup>29</sup>Although China is by far the most important third-party force, a number of other nations—Israel, India, Iraq, Iran, Pakistan, Saudi Arabia, and others—have substantial conventional capabilities, and thus might pose a threat in the abstract to the forces of the superpower alliances. Their location and limited power-projection capabilities generally make the practical threat less formidable, however. This situation could change dramatically if these states came to possess both nuclear weapons and the means for their long-range delivery.

war would *necessarily* continue after the fall of the FRG, but the *possibility* that it would. There will be a decision to be made, and in a protracted-war scenario one may well have to face the decision.<sup>30</sup>

If NATO holds the Pact's advance into the FRG to a minimum, then one must consider seriously what would satisfy the Soviets sufficiently for them to agree to terminate the war.<sup>31</sup> Presumably the Pact would not invade the FRG for sport, but rather only if some extraordinarily vital interests were perceived to be at stake. One has some difficulty in imagining what motivation could be sufficiently compelling to prompt the Pact to strike westward across the inner German border (IGB) but sufficiently transient that the failure to conquer the FRG would nonetheless allow the Pact to terminate the war to its satisfaction. Perhaps a Pact that invaded the FRG to prevent reunification of Germany under Western influence could, if prevented from making any large-scale territorial gains, simply declare its objective achieved and retreat behind the IGB. Such a course of events might well be perceived as a significant defeat for the Pact, however, with all the accompanying political costs to the alliance and especially to the Soviets. If NATO does fairly well in defending the FRG and the Pact finds a return to the territorial *status quo ante* unacceptable, then one may well have a recipe for stalemate—that is, a significantly protracted war—with the two sides continuing to fight one another relatively near the IGB.

If such a stalemate were to develop and NATO's much-vaunted economic superiority over the Pact could be turned into superiority on the battlefield, or if NATO's forces were to prove effective in essentially halting the Pact's advance from the beginning of the conflict, then NATO would have to consider carefully *its* war-termination goals. If a Soviet advance had penetrated significantly but not decisively into the FRG and then stalled, NATO might, for example, have to decide whether it would be willing to settle for a cease-fire in place. The loss of any West German territory might prove unacceptable, but the possibility that switching from the defensive to the offensive might create serious political and military difficulties should not be ignored. One might note in this context that, if it is the nature of modern warfare in Central Europe that has

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<sup>30</sup>Of course, one presumably has to face this decision in a short-war scenario as well: it is a short war only if the war *ends* quickly. Nonetheless, the issue seems rarely considered.

<sup>31</sup>Mearsheimer has stated that "capturing a portion of West Germany" would be a "limited victory" for the Soviets that "is hardly an attractive option." Mearsheimer, 1983, op. cit., p. 166.

caused the Pact's offensive to stall rather than the particular competence of NATO's troops, NATO will have just as difficult a time as the Pact—perhaps more so owing to NATO's pre-war focus on defense.

If NATO is willing and able to conduct offensive operations in Europe, then it will face another difficult dilemma: Should the alliance aim simply to restore the *status quo ante*, i.e., the IGB, or should NATO rather attempt to redraw through force the lines demarcating the Soviet sphere of influence? The restoration of the IGB certainly appears in peacetime to be the declared objective of NATO in wartime, and an objective presumably less threatening to the Soviets than would be the liberation of Eastern Europe. In addition, political losses to the Pact's regimes from a failed offensive against NATO are likely to be very high, and a restoration of the IGB after a massive Pact offensive is certainly likely to be perceived as such a failure. Nonetheless, wars in Europe generally lead to changes in territorial boundaries or spheres of influence rather than to their preservation. In addition, there are likely during a war to be pressures on NATO to attempt to reduce the cohesion of the Pact, and those attempts could include promises of liberation of the non-Soviet members of the Pact. In addition, the liberation of Eastern Europe from the Soviet yoke might be a more inspiring war aim to the general populace of NATO than a simple return to the *status quo antebellum*: Democracies, difficult to bestir, generally prefer once roused to rid the Continent of a particular scourge rather than simply to keep pre-war boundaries tidy.<sup>32</sup>

Others have suggested that NATO should declare that it would, in response to a Pact invasion of the FRG, attempt to capture territory in Eastern Europe.<sup>33</sup> If deterrence were to fail, such a declaratory policy might be implemented under either a rationale that Eastern Europe should be liberated from the Soviet yoke or under a rationale that believed that the capture of East European territory would improve NATO's bargaining position in negotiations to end the war. One might note, however, that the rationales implicitly conflict once an offensive into Eastern Europe has succeeded: The bargaining-chip rationale would presumably have NATO return the occupied territories to the Pact, whereas the liberation rationale would presumably have NATO keep such territory out of the Pact's control. One can at least imagine some qualms in NATO if

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<sup>32</sup>I am indebted for this idea to my colleague William Schwabe.

<sup>33</sup>Huntington, op. cit., pp. 40-44.

East European territory were to be first "liberated" and then returned, occupants and all, to the Soviet sphere as a "bargaining chip."

The possibility that offensive action could be used to liberate East European nations raises the second important political issue that one cannot ignore in a protracted war: the internal cohesion of the opposing alliances. Many ascribe to the Soviets a need to mobilize rapidly, and bring the war to a rapid conclusion, before the non-Soviet members of the Warsaw Pact become disgruntled with the course of events.<sup>34</sup> NATO's intra-alliance cohesion is likely to be similarly subject to the prolonged stress of protracted war. The more freely consensual nature of the NATO alliance may make a commitment to war by one of its members more enthusiastic than would be the case with non-Soviet members of the Pact pressured by the Soviet Union, and thus in some sense more reliable. Nonetheless, if Soviet pressure can push allies into war, it is likely that Soviet pressure can also make it more difficult for non-Soviet members of the Pact to exit the war. NATO members who do get cold feet will be more easily able to make the decision to go home.

Whatever the comparative long-term cohesion of the two alliances, one should remember that a nation rarely orders its armies simply to *stroll off the battlefield* because it is dissatisfied with an overlong war. Nations generally surrender because their territory has been occupied or because the collapse of their military and political systems appears imminent. One may well see differences in battlefield performance that stem partly from relative unenthusiasm, but wholesale changes in the numbers of forces available to the alliances are historically much less common.

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<sup>34</sup>On the latter possibility, see Johnson et al., op cit.; Huntington, op. cit., n. 8.

### III. A RESEARCH AGENDA FOR PROTRACTED WAR

#### SOME SPECIFIC ISSUES

The outcome of a protracted war depends in some measure upon all of the factors that will influence the outcome of a short war—the quality and quantity of forces engaged, the movement and attrition rates that turn out to prevail in modern combat in Central Europe, the political cohesion of the opposing alliances, and so forth. There are, however, some issues that are both particularly important in protracted war and particularly unexplored in current discussions of short war. The agenda suggested here concentrates on these latter issues.

The sustainability issues are perhaps the most crucial. Worries about sustainability have existed for a number of years, and it seems likely that the next few years will see the completion of a number of studies focusing at least on the sustainability of NATO's forces using pre-war stocks. Nonetheless, other sustainability issues remain essentially ignored. The ability of the European nations to produce large quantities of munitions in a relatively short period of time is sometimes asserted, but has not been analytically demonstrated. The inability of the United States to produce munitions and end items in the short run, and its ability to do so in the long run, are both generally assumed. An examination of the bottlenecks that might be faced even in a long war might nonetheless be profitable.

Similarly, wartime improvisations that might dramatically reduce the production time of end items—such as the production of simpler if less capable weapons systems—could be explored. The use of third-party systems, such as Israeli F-15s, is one temporary "work-around" to this problem; one possibility would be to include in arms-sale agreements an "emergency repurchase" option exercisable by the original producer of the goods so long as the originally purchasing state were not itself embroiled in conflict at the time the option was exercised.

Finally, the cursory treatment of Soviet stocks that their magnitude makes possible in a short-war scenario is less justifiable when one considers protracted war, and exploring the Soviets' capability actually to *produce* ammunition might therefore be desirable.

An issue that is less important, but perhaps more tractable, than the direct consideration of sustainability is the question of how mission effectiveness and attrition will change during the transitional period when pre-war stocks of high-technology munitions dwindle and intra-war production of such weapons has yet to result in any significant deliveries of end items. The likely effect on tactics of the vanishing of high-technology munitions seems relatively predictable, and the resulting changes in mission effectiveness and attrition should therefore be open at least to reasoned speculation. Current analysis focuses almost exclusively on the question of how best to use sophisticated weapons platforms with sophisticated weapons, but a war in which the stock of high-technology munitions diminishes more rapidly than the planes and ships that carry them are destroyed will require commanders to use sophisticated platforms with relatively crude weapons. The related question of whether it will be possible or desirable to ration high-technology munitions could similarly be addressed, and with it the question of which missions should receive priority in the expenditure of high-technology munitions. Answers about sustainability and tactical adaptability may lead to the need and capacity to study ammunition rationing. If the pre-war ammunition is likely to be insufficient, then the potential need for rationing is clear. If intra-war tactical reallocations are studied before the war, analysts may in peacetime have some capacity to study how ammunition should be rationed in terms both of type and of allocations to particular missions.

The political (or political-military) issues of Soviet nuclear doctrine, the intervention *vel non* of the Chinese, and goals for war termination are all important in considering protracted war. The Soviets' willingness to use nuclear weapons in Europe is, of course, an issue also important in a short-war scenario, and has been the subject of significant debate for many years. War-termination goals seem both politically and analytically quite difficult to discuss in peacetime, since the FRG (to name an example) is unlikely to be keen on discussing how the United States might end the war if West Germany is swallowed by the Warsaw Pact, and since the particular course of events in the war is likely to be a crucial determinant of the peace.

But the issue of Chinese intervention, in contrast to the questions of Soviet nuclear doctrine and war termination, seems both relatively untreated and susceptible to some useful speculation. It might well be useful to explore the factors likely to influence the Chinese in deciding to intervene on one side or the other, or to take advantage of war in

Central Europe to pursue their own objectives in Asia, or simply to sit out the war. The impact of these interventions—or the potential for these interventions—on the military situation could clearly be dramatic, with the resulting need for the United States to reassess the effective wartime balance with respect to the Soviets. The "China card" could be as crucial in wartime as it is sometimes assumed to be in peacetime, and study of the possible roles of the People's Republic during a war involving NATO and the Warsaw Pact—whether short or protracted—may therefore be warranted.

### **OUTCOMES AND PHASES**

The outcome of a protracted war may have much to do with the same factors that would determine the outcome of a short war: the quantity and effectiveness of available men, weapons, and munitions; the quality of the officers and men of various nationalities; and the suitability and clarity of the strategies of the opposing forces. Most feel that, at least in a conventional war, NATO is at a significant enough net disadvantage to the Pact on the first of these factors that NATO's possible superiority on the others is insufficient to promise much success in restraining a rapid Pact advance to the Rhine. In this version of a short war, NATO may be a loser in a few weeks.

If we speculate on a war that for some reason goes on for years, however, NATO's chances presumably brighten. NATO's industrial potential, as measured grossly by current GNP, is far superior to that of the Pact. European wars in the 20th century have been total wars, in which there has been time to beat plowshares (and everything else) into swords, and thus time for the forces of production in an industrialized nation to triumph over forces that were initially better prepared but were eventually supported inadequately.

NATO's potential advantage in the new-forces phase does not mean, however, that NATO's prospects during the transitional phase are particularly bright.<sup>1</sup>

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<sup>1</sup>Huntington, *op. cit.*, p. 43, appears to argue that a NATO counteroffensive into Eastern Europe is desirable in part simply because it would prolong the war:

A prompt Allied offensive into Eastern Europe would also greatly increase the probability of a protracted war. Soviet planning, however, is in large part directed toward a short-war scenario in which the Soviets score a breakthrough, occupy a substantial portion of West Germany, and then negotiate a cease-fire from a position of strength. With a retaliatory strategy, Soviet armies might be in West Germany but Allied armies would also be in East Europe, and driving them out would require more time for mobilization and organization of a counteroffensive.

The transitional phase is by definition one in which intra-war production does not yet have a dramatic impact on the force balance, and a NATO outnumbered at the beginning of the war is therefore likely to remain outnumbered through the transitional phase. Indeed, NATO's comparative battlefield effectiveness may well decrease significantly because of sustainability problems. A prolonged Soviet anti-SLOC campaign could have an impact on available shipping that overbalances the diminution in transport needs flowing from the completion of movement of forces from the United States into combat theaters and from intra-theater attrition. And even if free transport is available for inter-theater movements, NATO's options for horizontal escalation may not be particularly attractive. The relative cohesion of the two alliances is something of a toss-up, and NATO's war aims may suffer from a lack of clarity or inspirational power if it chooses simply to attempt to restore the pre-war *status quo*. One might ask if the only clear advantage that NATO possesses is the potential for greater flexibility and adaptation on the battlefield.

One can therefore sketch a gloomy picture for NATO without a great deal of difficulty. If some combination of high attrition and a greater-than-predicted difficulty in converting to wartime industry meant that more than a year of war passed before NATO could begin to make its economic advantages tell on the battlefield, the Pact would obviously have a good deal of time to achieve its objectives. Indeed, the Pact might even wind up conquering virtually the entire continent of Europe<sup>2</sup> even though its attack initially failed to reach the Rhine in the first 30 days—and was thus, by the narrow standards typically employed, a failure. Under the widely held assumption that amphibious operations to retake the continent would be doomed to failure, the war would then be largely lost. If the short-war assumptions should prove false, therefore, it may be that a victory for NATO requires it to mount a successful defense for many months, not just for a few weeks. To be conclusively pessimistic, however, requires a good deal more research.

#### **IMPLICATIONS FOR THE ANALYTIC AND POLICYMAKING COMMUNITY**

In the meantime, there are a number of issues that members of the analytic and policymaking community can address if they acknowledge that protracted war is a potential outcome of conflict in Central Europe:

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<sup>2</sup>One must always qualify such a statement by acknowledging that the Soviets would ponder matters quite seriously before attempting to overrun French soil guarded by the *force de frappe*.



- Those in the analytic and policymaking community who carry in their head a clear image of war in Central Europe for its first few weeks or months and no image of war in Central Europe afterward should realize that they are adopting a historically, though not necessarily a bureaucratically, unfounded view.
- Those who study political-military factors should examine the long-term cohesion of alliances, and also consider how a conventional conflict in Europe could end once it had begun—other than with an effort to impose total defeat upon one side, with the attendant risks of nuclear escalation.
- Those involved in arms sales to foreign countries should consider, and attempt to formalize, the degree to which the purchasing country would be willing to resell the weapons to the original seller in a time of need for the original seller.
- Those involved in the ammunition-distribution system should contemplate what criteria might best be applied in a system of ammunition rationing, and how to implement such criteria in a confusing and dynamic wartime environment.
- There is a need for someone to study what conventional warfare in Europe will be like after the first few weeks or months, but before six months, of combat: Currently, the vast majority of analysts focus on the first 30 days of combat in Central Europe, whereas the industrial-mobilization and manpower-mobilization analysts focus on factors unlikely to affect the battle until at least 180 days have passed.
- Those involved in formulating doctrine and tactics, and in training members of the armed services to use those tactics, should realize that they must allow for the possibility that their currently preferred tactics may quickly prove unsuited for combat, and will in many cases be inevitably mooted by the disappearance of high-technology munitions.
- Those involved in decisions affecting wartime targeting should consider whether some targets currently allocated high-technology weapons should instead be allocated low-technology weapons in the event of protracted conflict—or whether instead the greater attrition that platforms suffer when delivering low-technology munitions *always* makes it wiser to use high-technology weapons if any are available.